

## **Innovation Technical Handbook**

# **InnCharge Call Accounting Step by Step installation guide**



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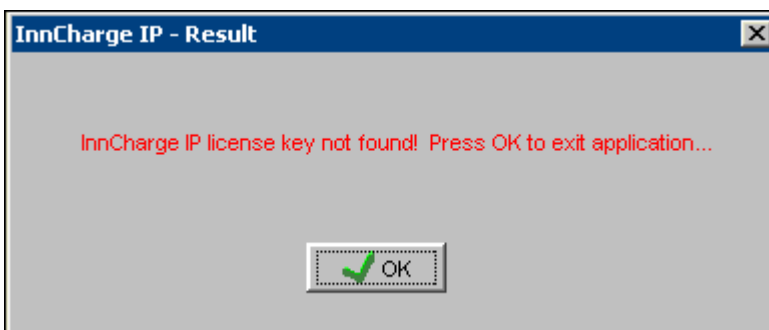
## Contents

STEP 1: Connect the HASP key to the system.....	3
STEP 2: Ensure that the proper PBX port type was chosen.....	3
STEP 3: Prepare to program Hotel Staff stations.....	5
<i>Adding stations one at a time:</i> .....	5
<i>Adding stations in a range:</i> .....	8
STEP 4: Prepare to program Guest stations.....	10
<i>Only one station per Guest room (room number matches station number):</i> .....	11
<i>Only one station per Guest room (room number does not match station number):</i> .....	11
<i>Two stations per Guest room (room number does not match the first station):</i> .....	13
<i>Adding Guest room stations manually:</i> .....	14
STEP 5: Configure Guest Billing .....	15
<i>Initial/Additional Period (Threshold Billing) Example:</i> .....	19
<i>Bubble Pricing Example:</i> .....	20
STEP 6: Configure Special Numbers .....	21
STEP 7: Connect your SMDR cable to the system .....	22
STEP 8: Connect a serial interface cable from InnCharge IP to the PMS .....	26
<i>About the PMS output formats:</i> .....	28
<i>Sending admin call records to the PMS:</i> .....	29
<i>Sending a hobic record using the "Generate Test Call" tool:</i> .....	30
STEP 9: Accessing the InnCharge IP web interface .....	33
STEP 10: Setting up the InnCharge IP Client (optional) .....	34
<i>Mapping a network drive:</i> .....	35

This document is intended to help you configure the InnCharge call accounting system. While it does not address every function of the call accounting software, it will guide you through the area's you need to access in order to get the system up and running for a basic install. There are several items you must first address before connecting the SMDR and PMS serial connections. Following these steps first will result in a smooth and successful installation.

## **STEP 1: Connect the HASP key to the system**

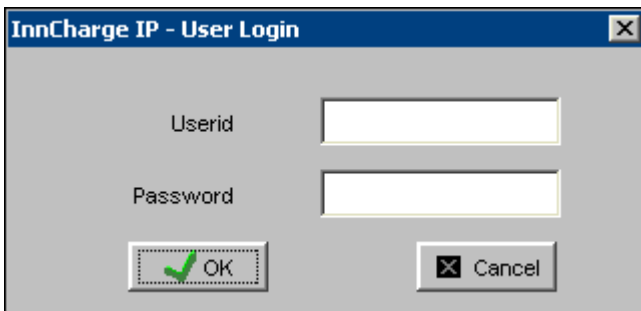
Depending on your system, you may be running InnCharge co-resident with the InnLine voicemail system. If that is the case, the HASP key will serve as security protection for both applications. However, if you are running InnCharge on a standalone system (such as the book PC hardware platform), you will connect a USB style security HASP to the back of the system. The system type will dictate which style of HASP you have (USB or parallel). If the key is not connected, InnCharge will fail to load, resulting in the following error message:



If this occurs, simply attach the key. Go to services, start the InnCharge CDR Processing Service. Then re-start the call accounting application.

## **STEP 2: Ensure that the proper PBX port type was chosen**

This setting was preset by Innovation's Production department before the system was shipped. To verify that the proper PBX port type was chosen, click the PBX icon (located above on the tool-bar). The application will prompt you with this dialog box before proceeding:



Entering a User Name and Password of **admin** will allow you access to all areas of this application. It is recommended that you NOT share this user name and password with the end user.

After entering the user name and password, the follow screen is displayed:

**Setup - PBX Input Parameters**

PBX	NPA/ABC	PBX Name	PBX Model
0	608/798	Mitel	Mitel - 200ICP

Id: 0    NPA: 608    ABC: 798    PBX Name: Mitel  
 Status: ☐ OFF ☒ ON    Port Type: Mitel - 200ICP  
 Record Length: ☐ Fixed ☒ Variable

Buttons: Insert, Update, Delete, Apply, Save Port, Close, Update Settings

Tabs: Outgoing Format, Incoming Format, Internal Format, Communication Parms, General, FTP

**Outgoing Call Format**

Field	Pos	Len	Format
Blank	0	1	
Date	1	5	mm/dd
Blank	6	1	
Time	7	6	hh:mmz
Blank	13	1	
Duration	14	8	hh:mm:ss
Blank	22	1	
Station	23	5	b
Blank	28	1	
LCR	29	1	
Blank	30	3	
Dialed Digits	33	26	b

RecordLength: 130

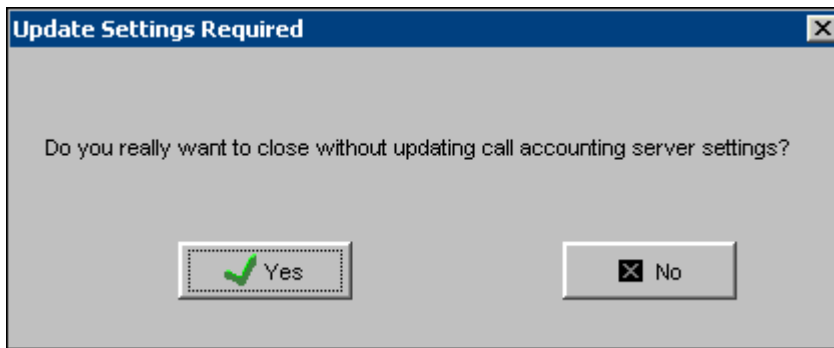
**Field Types**

- Blank
- Station
- Room
- Date
- Time
- Duration
- Amount
- Trunk
- Dialed Digits
- Account Code
- LCR
- String
- Sequence No
- CR
- LF
- NUL

Buttons: Add Field, Edit Field, Delete Field, Move Up, Move Down

In the example, the port type **Mitel – 200ICP** has been loaded. If this is not the correct port type, click the **Update** button. Now click the drop down box under Port Type, and choose another<sup>1</sup>. Note that the PBX Name does not change when you choose another port type, so you'll need to rename that as well. Click **Apply** when done. Click the **Close** button to exit this form. Since we didn't choose the **Update Settings** button, the following window appears:

<sup>1</sup> If you don't see a port type for your PBX, contact Innovation Technical Support. We'll help you create a custom PBX port type using the systems data monitor tools.

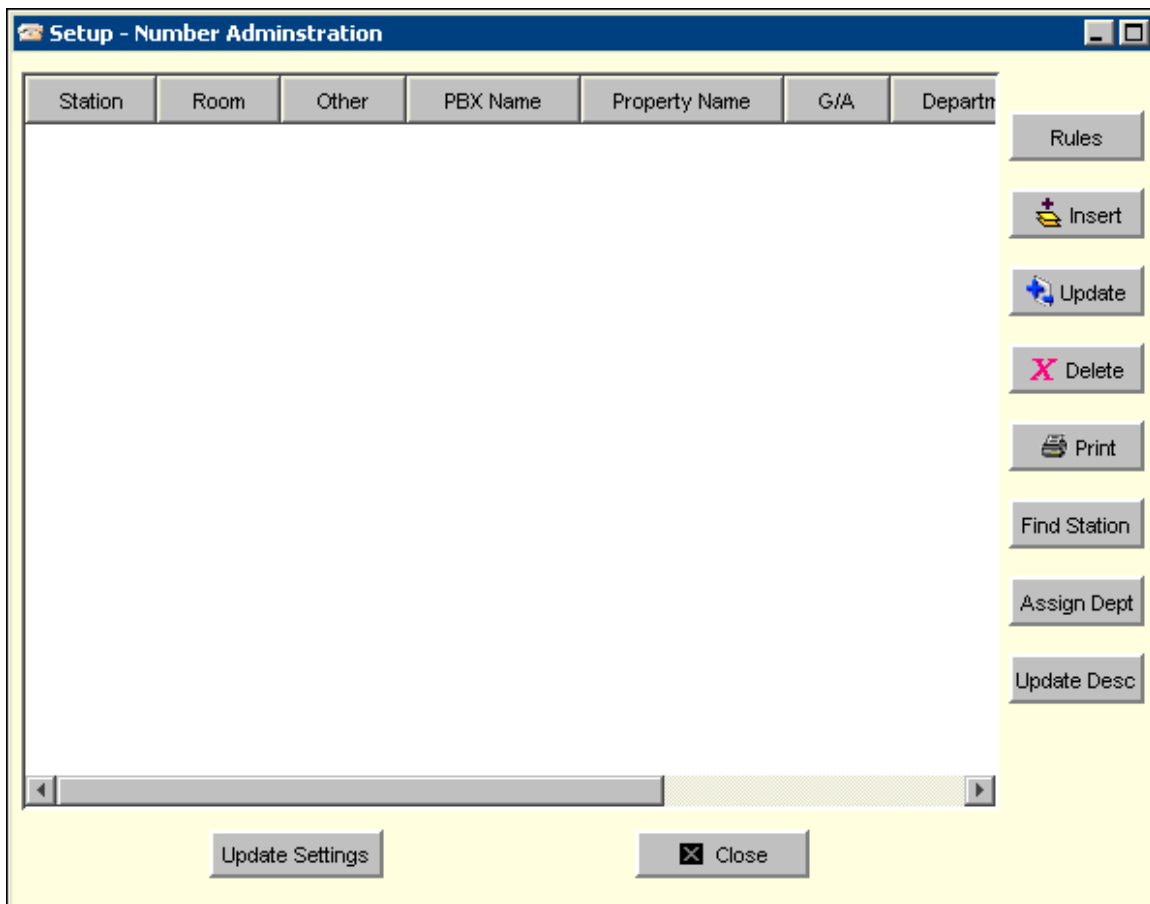


Since the system is new and requires more programming, click **Yes**. Your new PBX port type (if you changed it) will still be saved. We'll update the call accounting server once we are finished programming everything.

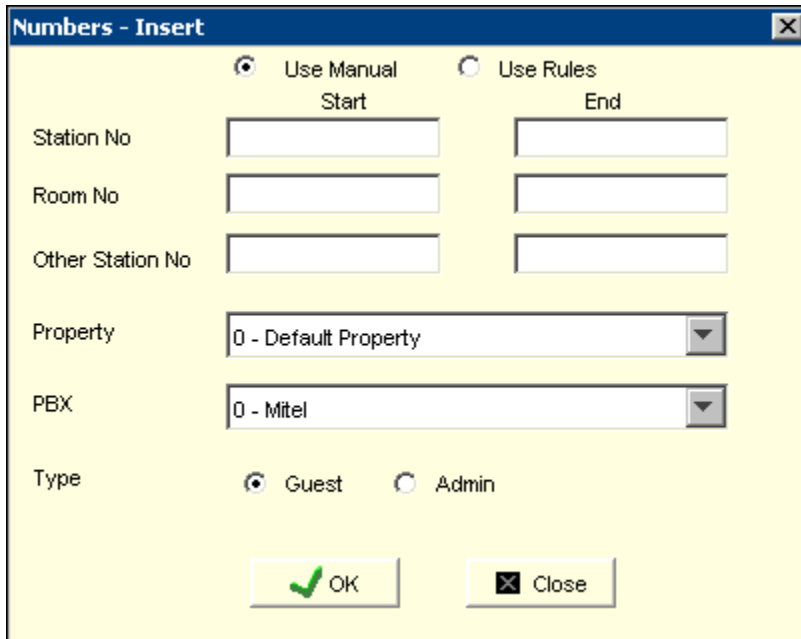
### **STEP 3: Prepare to program Hotel Staff stations**

#### ***Adding stations one at a time:***

To begin this step, click the EXTS icon on the applications tool bar. The following screen is displayed:

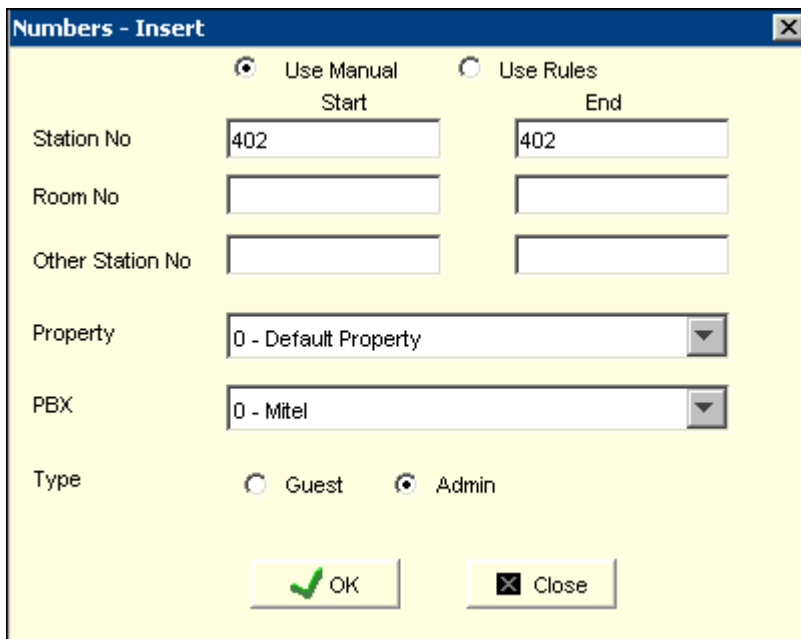


Click the **Insert** button to add your first administrative station. The following screen is displayed:



The "Numbers - Insert" dialog box is shown. It has a title bar with a close button. Inside, there are two radio buttons: "Use Manual" (selected) and "Use Rules". Below these are two columns of input fields labeled "Start" and "End". The "Start" column has three fields: "Station No", "Room No", and "Other Station No". The "End" column has three corresponding empty fields. Below these are two dropdown menus: "Property" (set to "0 - Default Property") and "PBX" (set to "0 - Mitel"). At the bottom, there are two radio buttons for "Type": "Guest" (selected) and "Admin". At the very bottom are two buttons: "OK" (with a green checkmark) and "Close" (with a red X).

In our example, the first administrative station we will add is 402:



The "Numbers - Insert" dialog box is shown again, but now the "Station No" field in the "Start" column contains the number "402". The "End" column's "Station No" field also contains "402". The "Type" radio buttons are now "Admin" (selected) and "Guest" (unselected). All other fields and buttons remain the same as in the previous screenshot.

Enter the number as shown above. Note that by default, the "Guest" radio button was selected. Make sure to select "Admin". Click **OK** to add this station. The station you just added is now displayed in the Number Administration window:

Station	Room	Other	PBX Name	Property Name	G/A	Department
402	0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	

Buttons: Rules, Insert, Update, Delete, Print, Find Station, Assign Dept, Update Desc

Note that the Department is set to **0 – Auto-Assign Stations**. This is the guest department that we’ll discuss later. Click the **Assign Dept** button to change this:

Department Assignment

New Department: Please Select

OK Cancel

Click the drop down to change the department:

Department Assignment

New Department: Please Select

- 0 - Auto-Assign Stations
- 1 - General Administrative
- 2 - Engineering
- 3 - Food & Beverage
- 4 - Housekeeping
- 5 - Sales
- 6 - Front Desk
- 7 - Managers

OK

Choose an administrative department that fits for the station. If you don’t see one that works, just choose “General Administrative. You can add additional departments and go back to change it. We’ll discuss this later in the document.

Click OK after selecting a different department. Station 402 now belongs to a different department:

Setup - Number Administration						
Station	Room	Other	PBX Name	Property Name	G/A	Department
402	0	0 - Mitel	0 - Default Property	A	7 - Managers	

The reason for changing departments (not keeping them all in the auto-assigned stations department) is mainly for flexibility in reporting.

Next, you can add a description to this administrative station. Select the station and click on the **Update Desc** button:

**Update Station Description** ✕

Station / Room:

PBX:

Description:

☒ OK ☐ Cancel

Enter a description, and click OK when done. The station is now updated with a description:

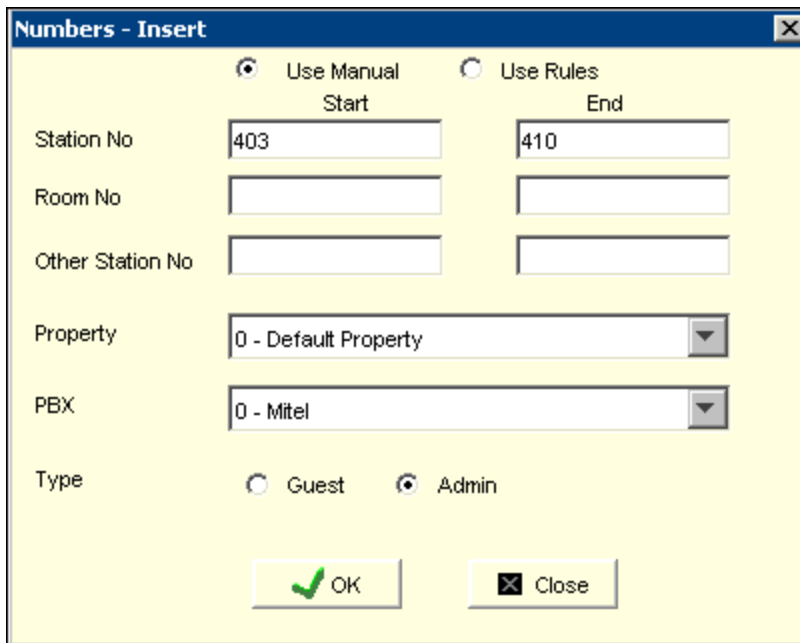
Setup - Number Administration							
Station	Room	Other	PBX Name	Property Name	G/A	Department	Description
402	0	0 - Mitel	0 - Default Property	A	7 - Managers	James Brown	

Rules

Continue with this process if you want to enter administrative stations on a one by one basis.

### ***Adding stations in a range:***

In the very first screen, notice that there is a “Start” field and an “End” field. When you are entering station one at a time, the same number goes in each field. If you have a range of administration stations, enter the first number of the range in the **Start** field, and the last number of the range in the **End** field:



**Numbers - Insert**

☒ Use Manual    ☐ Use Rules

Start                      End

Station No    403                      410

Room No                     

Other Station No                     

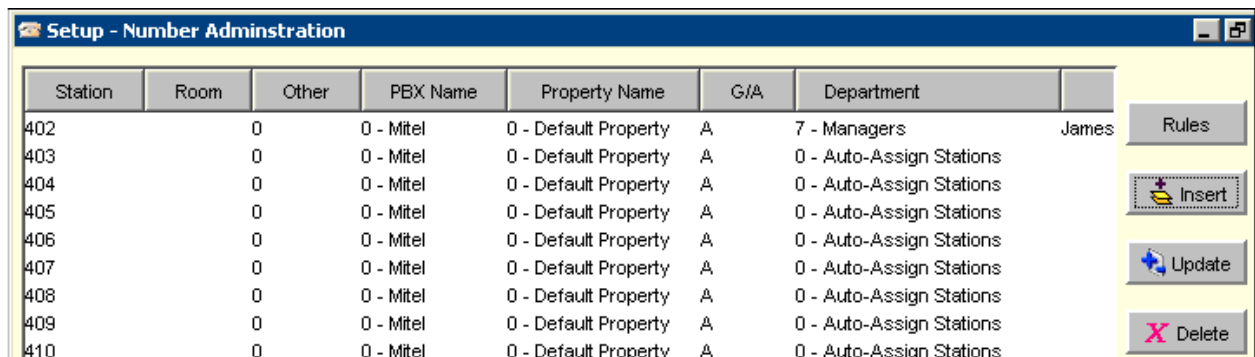
Property    0 - Default Property

PBX    0 - Mitel

Type    ☐ Guest    ☒ Admin

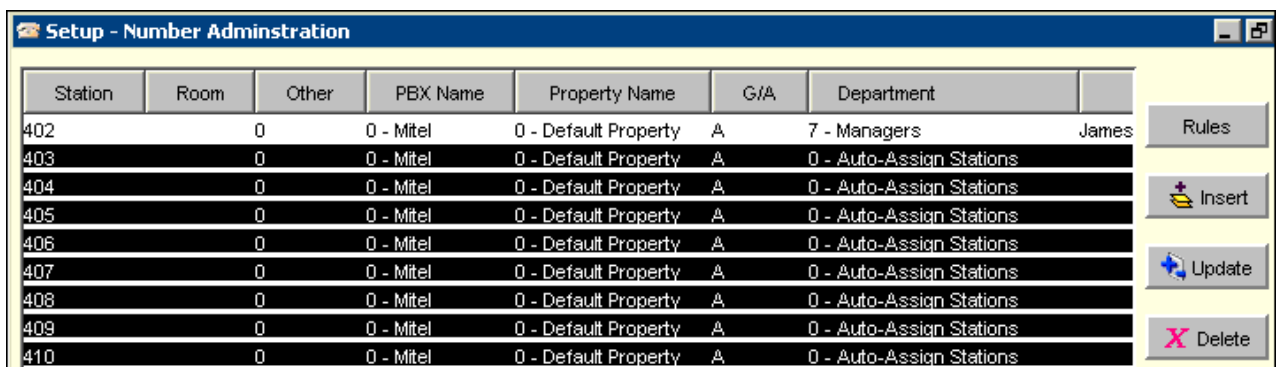
Don't forget to change the radio button from Guest to **Admin**. Click **OK** when done. The resulting range is displayed below:



Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	James
403		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
404		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
405		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
406		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
407		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
408		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
409		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
410		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	

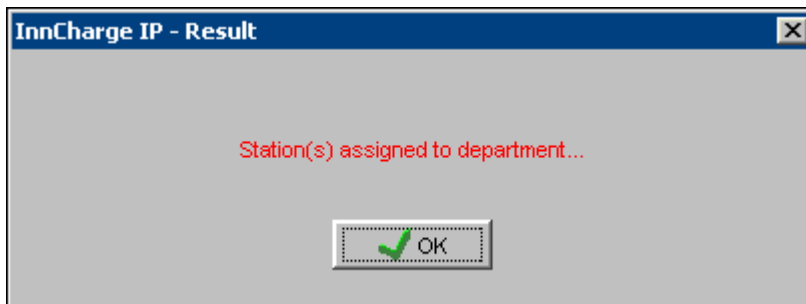
          

Again, we don't want to keep these stations in the **0 - Auto-Assign Stations** department. We can assign them all to a different department by highlighting them all:



Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	James
403		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
404		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
405		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
406		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
407		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
408		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
409		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
410		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	

Once they are all highlighted, click the **Assign Dept** button. In this example, we will choose General Administrative. Click OK.



The changes are displayed as shown below:

Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	James
403		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
404		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
405		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
406		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
407		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
408		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
409		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
410		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	

## **STEP 4: Prepare to program Guest stations**

Before proceeding with this step, gather the following information:

- Complete room numbering plan
- What is the room number vs. the actual station number? (example: Guest room 101 is actually station 7101)
- Is there a second station in the room? What is the numbering scheme of the second room stations? (example: the second room station is 1000 lower than the first station)

**Only one station per Guest room (room number matches station number):**

Do nothing. That's right! The reason is that when an SMDR record comes to the InnCharge application, it will see if that station has already been entered (remember, you just added all the staff stations). If it does not find it in the extension list, the system will automatically add it as a guest station and assign it to the **0 – Auto-Assign Stations** department:

Setup - Number Administration							
Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	James E
403		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
404		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
405		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
406		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
407		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
408		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
409		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
410		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
102	102	0	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
115	115	0	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
221	221	0	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	

Note that the number in the "Room" column matches the station number. It has been assigned as a guest (G) and put into the Auto-Assign Stations department.

**Only one station per Guest room (room number does not match station number):**

If this is the case, you will need to define some "rules" before the system can auto-assign guest stations with accuracy. As an example, let's say that the room numbers are 3 digit in length, but the station numbers for each room begin with the number 7 (room 101 is station 7101)

From the Setup – Number Administration form, click on the "Rules" button. Then click the "Insert" button to make the fields accessible. Using our example, program the following fields as shown below:

**Rules for Number Administration**

Starts With	Replace With	Other Starts With	PBX Name	Property Name

If Station Number "Starts With"  "Replace With"  for Room Number.  
 "Other Starts With " (Station Number)   
 PBX Name   
 Property Name

Click Apply when done. The new rule will be inserted. Based on your numbering plan, continue to add more rules as needed (for the second floor and so on). Now when a call is made from station 7101, the system will know how to properly reference the guest room in its database:

**Setup - Number Administration**

Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	Jame
403		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
404		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
405		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
406		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
407		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
408		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
409		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
410		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
7101	101	0	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	

**Two stations per Guest room (room number does not match the first station):**

As in the previous scenario, you will need to add the same rules, adding what the second extension will be. If you let the system auto assign these second room stations, you may be in danger of exceeding the number of stations the system is licensed for. In addition, some PMS systems rely on the call accounting application to send a hobic record based on the first extension, even though the call was actually make from the second. Creating these rules will properly associate this second room station with the first.

From the Setup – Number Administration form, click on the “Rules” button. Then click the “Insert” button to make the fields accessible. Using our previous example, the second room station will be 1000 lower than the first station (room 101 / 1<sup>st</sup> station: 7101 / 2<sup>nd</sup> station: 6101)

Click Apply when done. The new rule will be inserted. Based on your numbering plan, continue to add more rules as needed for the other floors Now when a call is made from the second room station 6101, the system will know how to properly reference it to the first station and the guest room in its database:

Setup - Number Administration							
Station	Room	Other	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	Ja Rules
403		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	Insert
404		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	Update
405		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	Delete
406		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	Print
407		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
408		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
409		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
410		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
7101	101	6101	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	

### Adding Guest room stations manually:

You can also choose to add all the guest room and station information manually. The first range we will add is rooms 201 through 211. The stations are in the 7000 (first station) and 6000 (second station) range. Click **OK** after filling in all the fields. Notice that the second room station range is defined in the **Other Station No** fields:

Numbers - Insert			
<input checked="" type="radio"/> Use Manual <input type="radio"/> Use Rules			
	Start	End	
Station No	7201	7211	
Room No	201	211	
Other Station No	6201	6211	
Property	0 - Default Property		
PBX	0 - Mitel		
Type	<input checked="" type="radio"/> Guest <input type="radio"/> Admin		
<input checked="" type="button" value="OK"/> <input type="button" value="Close"/>			

The changes are displayed as shown below:

Setup - Number Administration							
Stati...	Ro...	Oth...	PBX Name	Property Name	G/A	Department	
402		0	0 - Mitel	0 - Default Property	A	7 - Managers	James
403		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
404		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
405		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
406		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
407		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
408		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
409		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
410		0	0 - Mitel	0 - Default Property	A	1 - General Administrative	
411		0	0 - Mitel	0 - Default Property	A	0 - Auto-Assign Stations	
7201	201	6201	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7202	202	6202	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7203	203	6203	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7204	204	6204	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7205	205	6205	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7206	206	6206	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7207	207	6207	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7208	208	6208	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7209	209	6209	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7210	210	6210	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	
7211	211	6211	0 - Mitel	0 - Default Property	G	0 - Auto-Assign Stations	

Rules

Insert

Update

Delete

Print

Find Station

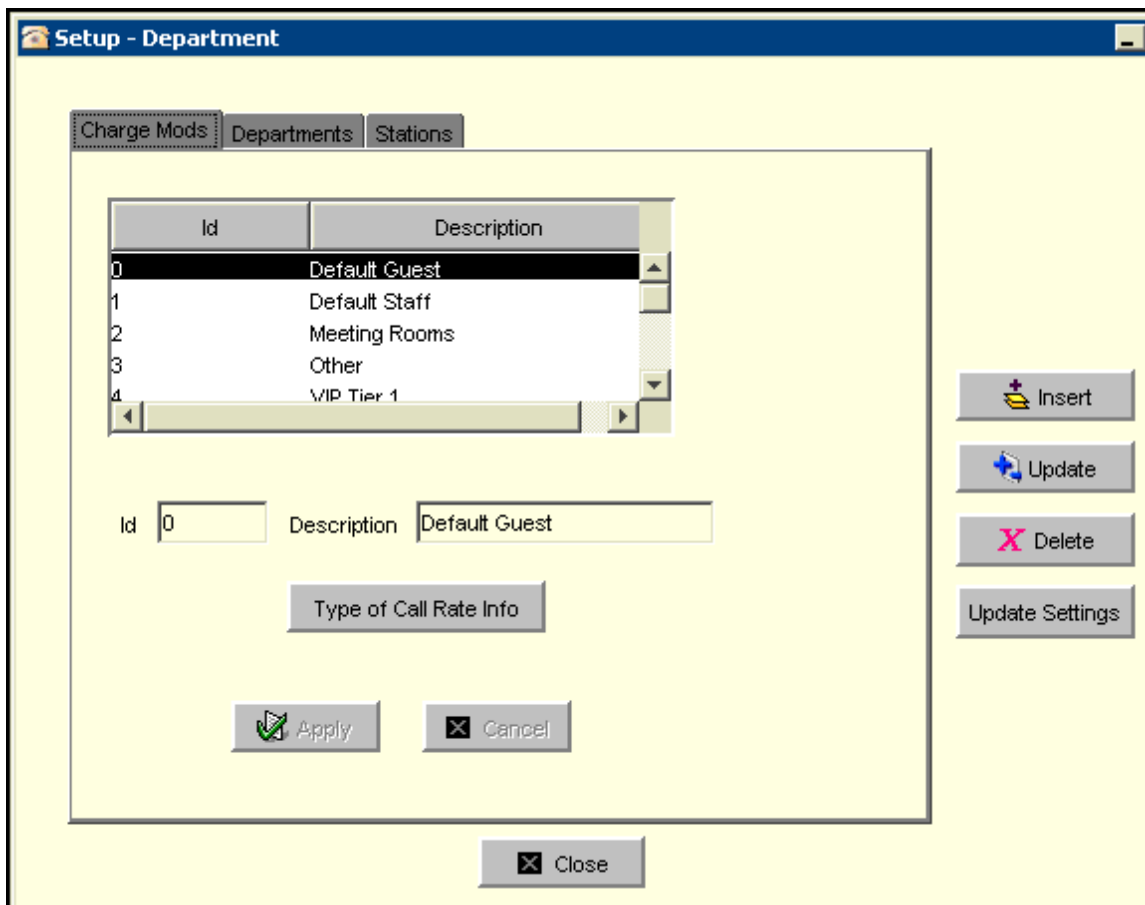
Assign Dept

Update Desc

Continue to add guest room ranges.

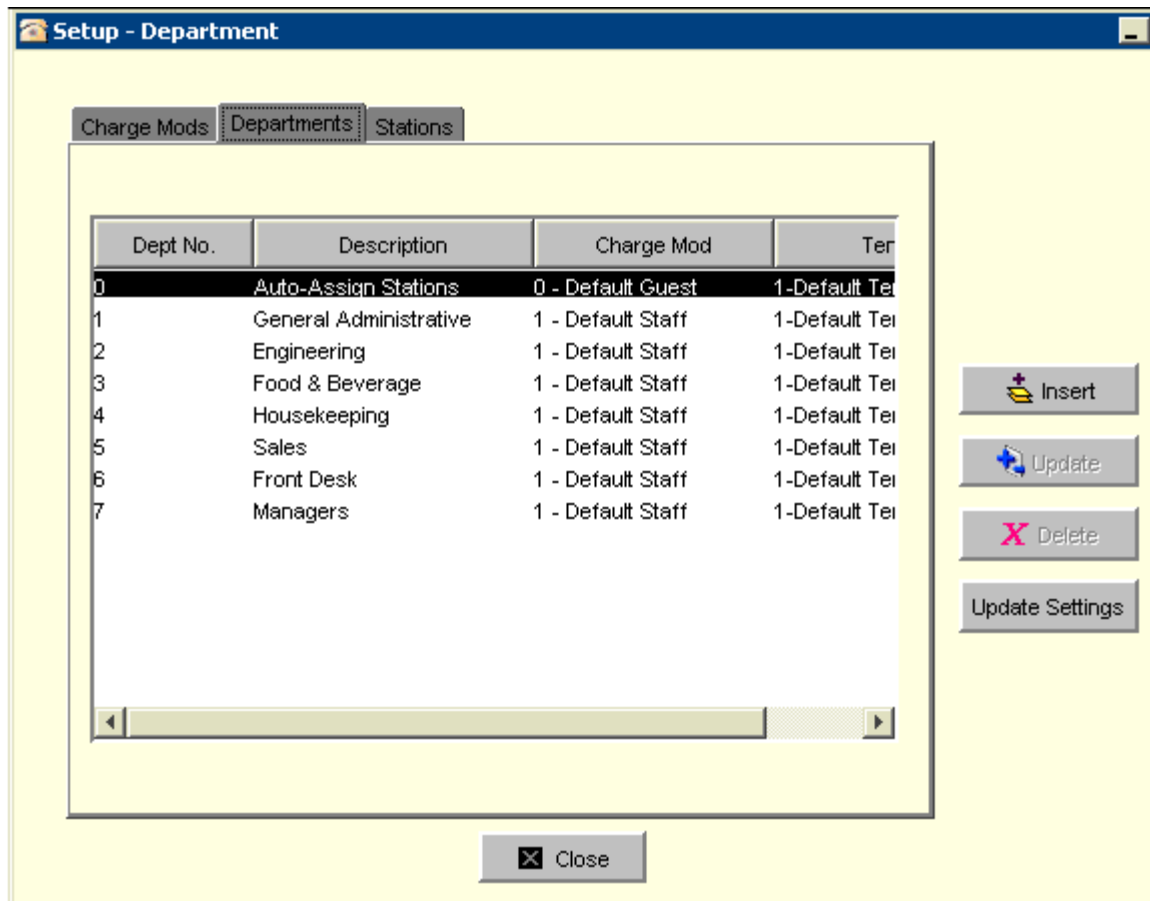
## **STEP 5: Configure Guest Billing**

Click on the **RATES/DEPTS** icon. The following window appears:



The InnCharge database has 15 predefined Charge Mods. The idea here is that you associate a Charge Mod with a Department, and then add stations to that department. The first Charge Mod (Default Guest) is associated with the Auto-Assign Stations department. This is why when you were adding administrative stations (back in STEP 3), you changed its department to something else. Otherwise, this administrative station would price calls using the Default Guest Charge Mod, and it would end up getting transmitted to the PMS.

Click on the **Departments** tab to see which departments are associated with what Charge Mod:



Go back to the **Charge Mods** tab. Keeping the Default Guest charge mod selected, click on the **Type of Call Rate info** button. The following window appears:

**Type of Call Rate Info - Charge Mod 0 (Default Guest)**

TOC	Markup %	Markdown %	Surcharge \$	Min Dur Sec	Billing Type	IP Sec	IP Rate \$
Local	0.00	0.00	0.00	20	Flat Rate	0	0.000
Intrastate	75.00	0.00	0.00	30	V&H	0	0.000
Interstate	75.00	0.00	0.00	30	V&H	0	0.000
Operator Assisted	0.00	0.00	0.00	0	Flat Rate	0	0.000
Free	0.00	0.00	0.00	30	Flat Rate	0	0.000
Alaska	75.00	0.00	0.00	30	V&H	0	0.000
Hawaii	75.00	0.00	0.00	30	V&H	0	0.000
Canada	75.00	0.00	0.00	30	V&H	0	0.000

Type of Call:  ☒ V&H Billing ☐ Flat Rate Billing ☐ Bubble Pricing

IP Sec:  IP Rate \$:  AP Sec:  AP Rate \$:

BP Start Sec:  BP End Sec:  BP Sec:  BP Rate \$:

Markup %:  Markdown %:  Surcharge \$:  Min Dur Sec:

Taxes:

Tax 1 %: <input type="text" value="0.00"/> <input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 4 %: <input type="text" value="0.00"/> <input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 2 %: <input type="text" value="0.00"/> <input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 5 %: <input type="text" value="0.00"/> <input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 3 %: <input type="text" value="0.00"/> <input checked="" type="radio"/> Percent <input type="radio"/> Amount	

Type of call - not copied.

Select which TOC you want to modify. This screen shows that for Interstate calls, the system is using V&H billing and a 75% markup, with no surcharge. The Min Dur Sec field is sec to 30. This is the “grace period” or “timer” for this type of call.

Adjust all other Call Category’s to your pricing needs. Click the **Apply** for each when done. Listed below are the predefined settings for the Charge Mod 0 (Default Guest):

TOC	Charge	Grace Period
Local	0% mark-up + 0.00 surcharge	20 seconds
Intrastate	75% mark-up + 0.00 surcharge	30 seconds
Interstate	75% mark-up + 0.00 surcharge	30 seconds
Operator Assisted	0% mark-up + 0.00 surcharge	0 seconds
Free	0% mark-up + 0.00 surcharge	0 seconds
Alaska	75% mark-up + 0.00 surcharge	30 seconds
Hawaii	75% mark-up + 0.00 surcharge	30 seconds
Canada	75% mark-up + 0.00 surcharge	30 seconds
Mexico	150% mark-up + 0.00 surcharge	45 seconds
Caribbean	150% mark-up + 0.00 surcharge	45 seconds
International	150% mark-up + 0.00 surcharge	45 seconds
Intralata Interstate	75% mark-up + 0.00 surcharge	30 seconds

TOC	Charge	Grace Period
Intralata Intrastate	75% mark-up + 0.00 surcharge	30 seconds
Other 1	0% mark-up + 0.00 surcharge	0 seconds
Other 2	0% mark-up + 0.00 surcharge	0 seconds
Incoming	0% mark-up + 0.00 surcharge	0 seconds

### Initial/Additional Period (Threshold Billing) Example:

Say you wanted the rate on Toll Free calls to be no charge for the first hour, but then 10 cents per minute after that. Program the **Free** TOC as shown below:

**Type of Call Rate Info - Charge Mod 0 (Default Guest)**

TOC	Markup %	Markdown %	Surcharge \$	Min Dur Sec	Billing Type	IP Sec	IP Rate \$
Local	0.00	0.00	0.00	20	Flat Rate	0	0.000
Intrastate	75.00	0.00	0.00	30	V&H	0	0.000
Interstate	75.00	0.00	0.00	30	V&H	0	0.000
Operator Assisted	0.00	0.00	0.00	0	Flat Rate	0	0.000
<b>Free</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0</b>	<b>Flat Rate</b>	<b>3600</b>	<b>0.000</b>
Alaska	75.00	0.00	0.00	30	V&H	0	0.000
Hawaii	75.00	0.00	0.00	30	V&H	0	0.000
Canada	75.00	0.00	0.00	30	V&H	0	0.000

Type of Call:  ☐ V&H Billing ☒ Flat Rate Billing ☐ Bubble Pricing

IP Sec:  IP Rate \$:  AP Sec:  AP Rate \$:

BP Start Sec:  BP End Sec:  BP Sec:  BP Rate \$:

Markup %:  Markdown %:  Surcharge \$:  Min Dur Sec:

**Taxes**

Tax 1 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 4 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 2 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 5 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 3 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount			

Type of call - not copied.

Notice that the **IP Sec** field is set to 3600 with an **IP Rate \$** of 0.00. This is the first "free" hour. To now charge .10 for each additional minute after that that first hour, the **AP Sec** field is set to 60 with an **AP Rate \$** of 0.10.

## **Bubble Pricing:**

Bubble Pricing allows the property to provide three tiers of threshold billing. The purpose of Bubble pricing is to bill higher rates for the “average call duration” while not penalizing guests for making longer than average calls. For example, if the majority of interstate calls have a call duration between 3 and 7 minutes, then this period will be used as the “bubble”. Bubble pricing uses the traditional initial and additional periods that work in concert with the bubble period start and end times.

## **Bubble Pricing Example:**

A property wants to use Bubble Pricing for interstate calls. The property has determined the majority of their calls have a duration of 3 to 7 minutes. They want to set their initial period to 10 seconds with a rate of \$0.12 and an additional period of 10 seconds with a rate of \$0.10 per additional period. The rate for calls that fall within the bubble is \$0.15 per 10 seconds. The property’s standard surcharge for a long distance call is \$1.00. The property wants to markup the charge by 100% to ensure additional profit. Program the **Interstate** TOC as shown below:

Type of Call Rate Info - Charge Mod 0 (Default Guest)

TOC	Markup %	Markdown %	Surcharge \$	Min Dur Sec	Billing Type	IP Sec	IP Rate \$
Local	0.00	0.00	0.00	20	Flat Rate	0	0.000
Intrastate	75.00	0.00	0.00	30	V&H	0	0.000
<b>Interstate</b>	<b>100.00</b>	<b>0.00</b>	<b>1.00</b>	<b>30</b>	<b>Bubble Pricing</b>	<b>10</b>	<b>0.12</b>
Operator Assisted	0.00	0.00	0.00	0	Flat Rate	0	0.000
Free	0.00	0.00	0.00	0	Flat Rate	0	0.000
Alaska	75.00	0.00	0.00	30	V&H	0	0.000
Hawaii	75.00	0.00	0.00	30	V&H	0	0.000
Canada	75.00	0.00	0.00	30	V&H	0	0.000

Type of Call:  ☐ V&H Billing ☐ Flat Rate Billing ☒ Bubble Pricing

IP Sec:  IP Rate \$:  AP Sec:  AP Rate \$:

BP Start Sec:  BP End Sec:  BP Sec:  BP Rate \$:

Markup %:  Markdown %:  Surcharge \$:  Min Dur Sec:

Taxes

Tax 1 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 4 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 2 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount	Tax 5 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount
Tax 3 %	<input type="text" value="0.00"/>	<input checked="" type="radio"/> Percent <input type="radio"/> Amount			

Type of call - not copied.

## STEP 6: Configure Special Numbers

Click on the **800/411 SPECIAL** icon. The following window appears:

Property	Prefix	Department	Description	Charge Mod	TOC
All Properties	1411	All Depts	Information	0 - Default Guest	Other 1
All Properties	1700	All Depts	Charge Service Calls	0 - Default Guest	Other 2
All Properties	1800	All Depts	Toll Free	0 - Default Guest	Free
All Properties	1855	All Depts	Toll Free	0 - Default Guest	Free
All Properties	1866	All Depts	Toll Free	0 - Default Guest	Free
All Properties	1877	All Depts	Toll Free	0 - Default Guest	Free
All Properties	1888	All Depts	Toll Free	0 - Default Guest	Free
All Properties	1900	All Depts	Charge Service Calls	0 - Default Guest	Other 2
All Properties	1950	All Depts	Carrier Access Services	0 - Default Guest	Free
All Properties	1976	All Depts	Charge Service Calls	0 - Default Guest	Other 2
All Properties	1XXX5551212	All Depts	LD Information	0 - Default Guest	Other 1
All Properties	1XXX976	All Depts	Charge Service Calls	0 - Default Guest	Other 2
All Properties	411	All Depts	Information	0 - Default Guest	Other 1
All Properties	5551212	All Depts	Information	0 - Default Guest	Other 1
All Properties	911	All Depts	E-911 Call	0 - Default Guest	Free
All Properties	XXX5551212	All Depts	Information	0 - Default Guest	Other 1

Info

Prefix: 1411    dialed from Property: All Properties

for a station in department: All Departments

should be billed as...

Description: Information    ☐ Use call chaining?

Charge Mod: 0 - Default Guest    Type of Call: Other 1

Buttons: Apply, Update Settings, Close

The InnCharge database has 34 “special number” entries predefined. Let’s look at the Toll Free entries. Select the 1800 prefix to view the pricing scheme info:

Info

Prefix  dialed from Property

for a station in department

should be billed as...

Description  ☐ Use call chaining?

Charge Mod  Type of Call

As defined, if a station dials a number starting with **1800**, from ANY Department, it will look at “Charge Mod 0 – Default Guest” and determine how the “Free” TOC is defined. The “Free” TOC for the Default Guest Charge Mod is presently \$0.00. If you wanted to apply a .50 surcharge to this prefix for only the Guest stations (and keep the staff stations at 0.00), the easiest way to accomplish this would be to create a new Charge Mod, and create a new Special number entry for this prefix.

## **STEP 7: Connect your SMDR cable to the system**

In most systems, COM7 will already be configured for SMDR records. Check this setting by clicking the PBX icon, then selecting the **Communications Parms** tab. This will bring up following window:

Outgoing Format Incoming Format Internal Format **Communication Parms** General FTP

☒ COM ☐ UDP ☐ FTP \* COM / UDP Port

Baud Rate  Ignore Hardware Handshaking

Bits / Byte ☐ 7 Bits ☒ 8 Bits

Parity ☐ Even ☐ Odd ☒ None

Stop Bits ☒ 1 Bit ☐ 2 Bits ☐ 0 Bits

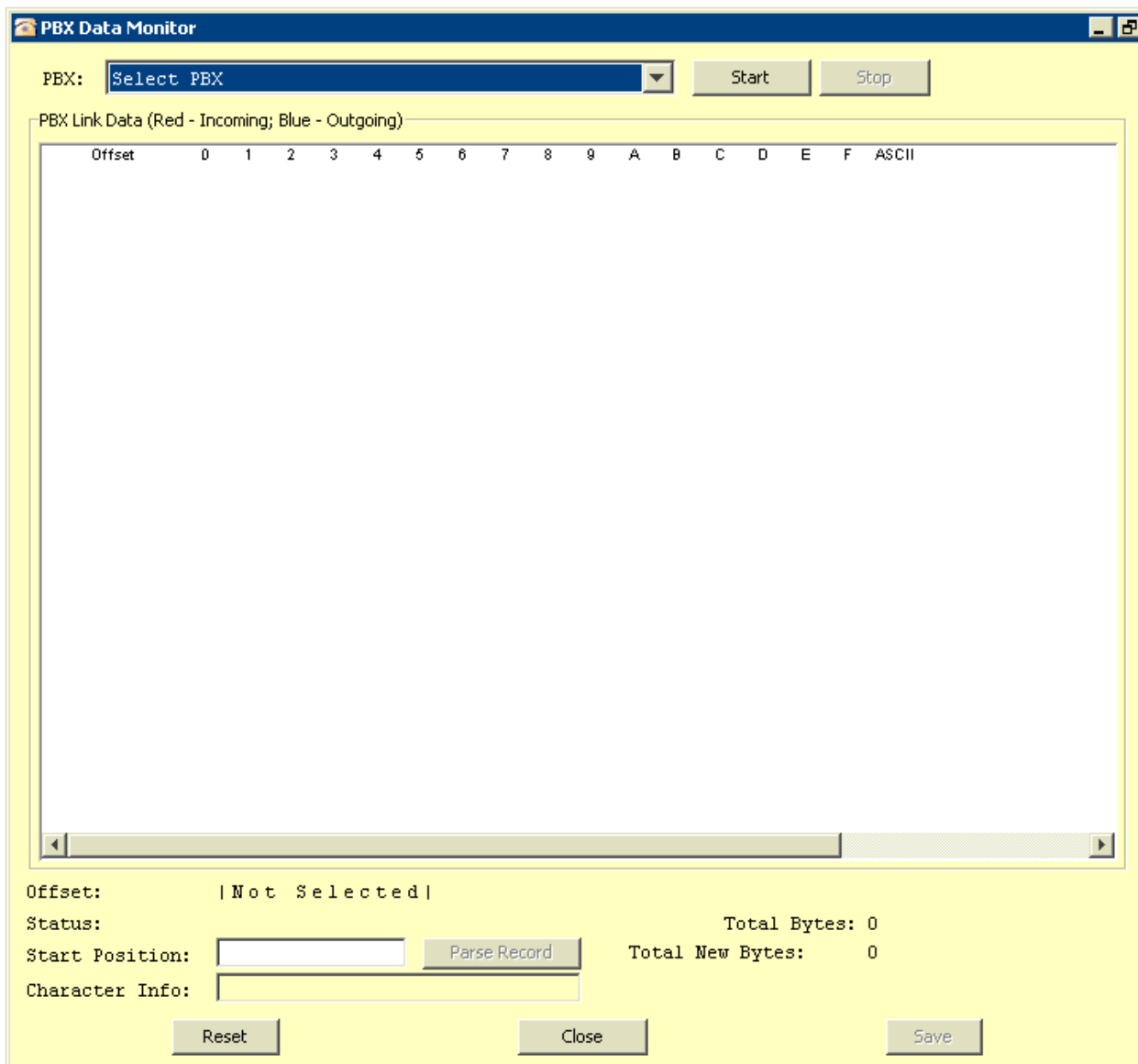
Use Ack Nak

Ack Nak

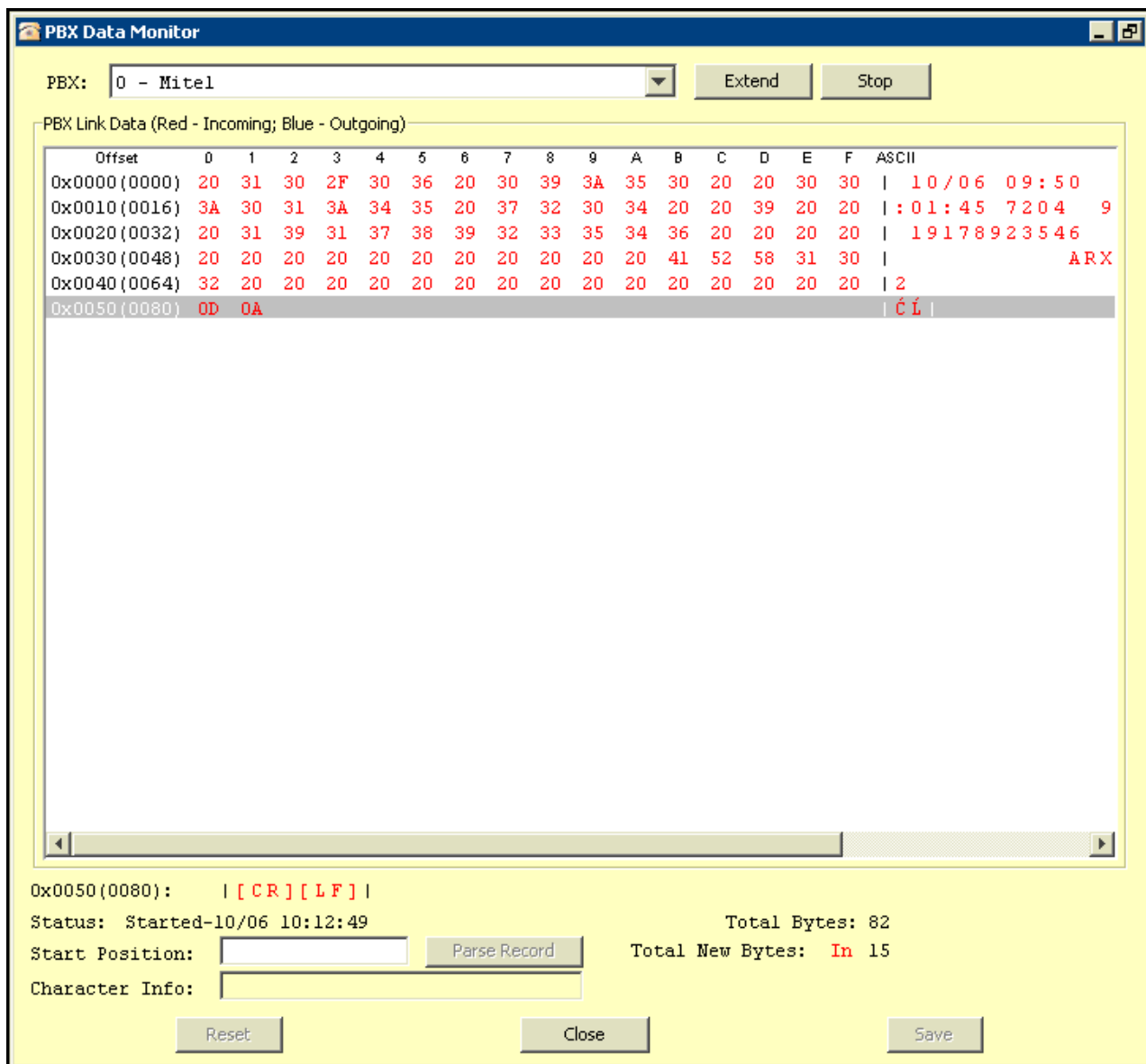
ENQ Timeout Timer	<input type="text" value="500"/>	250 - 3000 ms
Message Delay Timer	<input type="text" value="500"/>	250 - 3000 ms
Message Timeout Timer	<input type="text" value="500"/>	250 - 3000 ms
Use ENQ Protocol	<input type="radio"/> Yes <input checked="" type="radio"/> No	

Verify that you are connecting your PBX SMDR output to the correct COM port. Also adjust the Baud Rate/Parity/Stop bits as needed, clicking the **Update** button. Make your changes and click the **Apply** button when done.

To view the raw SMDR records as they are produced by the telephone systems, click on **Actions > Tools > PBX Data Monitor**.



Click on the PBX drop down box and select your PBX port type, and then click the **Start** button. As calls are made, SMDR records will appear in this window (both in HEX and ASCII. By seeing legible ASCII data, this tests the connection between the PBX SMDR output and the call accounting COM port.



When you are finished monitoring SMDR records, click the **Stop** button, and then the **Close** button.

If the records look unreadable, then your communication speed of your PBX's SMDR port is different than how it is set in the Communications Parms screen. If that is the case, click again on the PBX icon and select the Communication Parms tab to double check on the baud rate settings. Below is an example of what a baud rate miss match might look like:

PBX Link Data (Red - Incoming; Blue - Outgoing)																			
Offset	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	ASCII		
0x0000(0000)	00	80	00	80	78	3C	FF	80	F8	78	C0	00	80	80	F8	80		0	~
0x0010(0016)	00	80	00	80	80	80	80	80	F8	80	F8	80	80	78	00	80		0	~
0x0020(0032)	00	80	00	80	00	80	00	80	80	F8	80	00	80	78	00	80		0	~
0x0030(0048)	80	F8	80	80	80	80	80	F8	80	00	80	F8	F8	80	78	00		~	~
0x0040(0064)	80	00	80	00	80	00	80	00	80	78	C0	80	00	80	00	80		~	0
0x0050(0080)	00	80	78	00	80	78	C0	80	78	00	80	F8	F8	80	80	F8		0	~
0x0060(0096)	80	80	F8	80	00	F8	80	00	80	78	00	80	00	F8	80	00		~	~
0x0070(0112)	F8	80	00	80	00	80	00	80	00	80	00	80	00	80	00	80		~	~
0x0080(0128)	00	80	00	80	00	80	00	80	00	80	00	80	00	80	00	80		0	~
0x0090(0144)	78	00	78	C0	80	78	3C	00	78	3C	0F	80	80	00	80	78		x	0
0x00A0(0160)	00	80	00	80	00	80	00	80	00	80	00	80	00	80	00	80		0	~
0x00B0(0176)	00	80	00	80	00	80	00	80	00	80	00	80	00	80	00	80		0	~
0x00C0(0192)	78	FC	00	80	78	00												x	~

In the above example, the call accounting is set to receive SMDR records at 1200N81. The PBX is sending them at 300N81. Notice how the ASCII portion is completely unreadable. Different baud rate mismatches will produce different unreadable ASCII results.

After correcting and baud rate discrepancies, make a few test calls to generate some SMDR records. If you do not see any data, check the cabling. The systems DB25 male RS-232 ports are configured as a DTE device. This means the port transmits data on pin 2, and receives data on pin 3. Most PBX DB25 RS-232 ports are configured as DCE devices, which mean they transmit data on pin 3. So in most cases, a straight connection to systems COM port should work. In DB9 male configurations, the port transmits data on pin 3, and receives data on pin 2.

Signal	Name	DB-9 DTE	DB-25 DTE
DCD	Data Carrier Detect	1	8
<b>RXD*</b>	<b>Receive Data</b>	<b>2</b>	<b>3</b>
<b>TXD*</b>	<b>Transmit Data</b>	<b>3</b>	<b>2</b>
DTR	Data Terminal Ready	4	20
<b>GND*</b>	<b>Signal Ground</b>	<b>5</b>	<b>7</b>
DSR	Data Set Ready	6	6
RTS	Request to Send	7	4
CTS	Clear to Send	8	5
RI	Ring Indicator	9	22

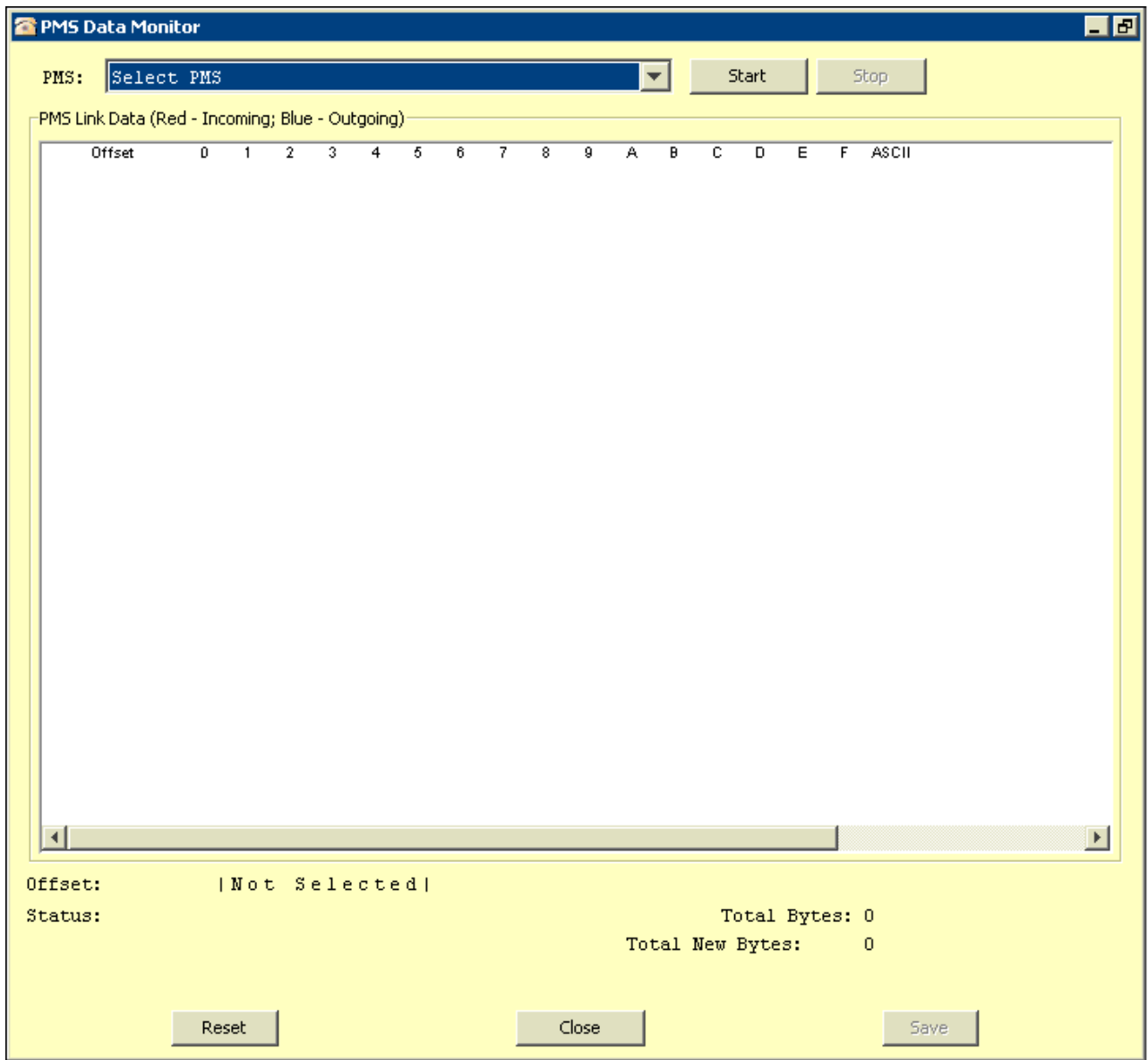
\* These three signals are of primary interest to the system.

## **STEP 8: Connect a serial interface cable from InnCharge to the PMS**

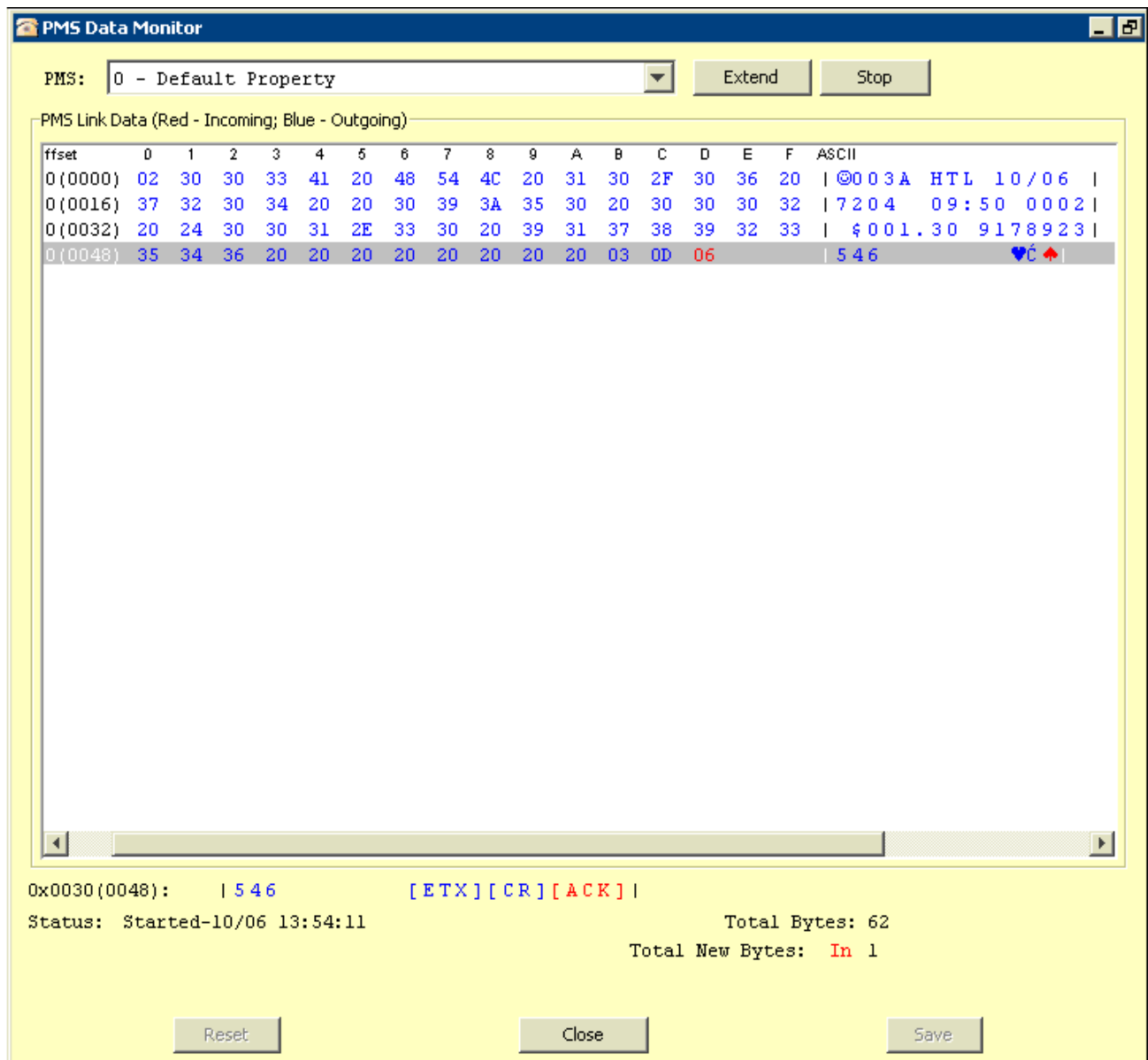
In most systems, COM8 will already be configured for outputting HOBIC records. Check this setting by clicking the PMS icon, then selecting the **Communications Parms** tab. This will bring up following window:

If your baud rate needs to be changed, or you need to enable the ENQ protocol, click on the **Update** button, make the changes, and then click the **Apply** button.

To view the Hobic records as they transmit to the PMS, click on **Actions > Tools > PMS Data Monitor**.



Click on the PMS drop down box and select your PMS port type, and then click the **Start** button. As hobic records are produced, data will appear in this window (both in HEX and ASCII. By seeing legible ASCII data, this tests the connection between the call accounting output and the PMS system.



When you are finished monitoring HOBIC records, click the **Stop** button, and then the **Close** button.

### **About the PMS output formats:**

InnCharge has two PMS output formats. They are:

1. ITW Hobic (station format) –system default
2. ITW Hobic (room format)

The station format sends the actual station that made the call. The room format will send the room number that the station belongs to when transmitting the hobic record to the PMS.

### ITW Hobic (station format) layout example:

1	2	3	4	5	6	7
01234567890123456789012345678901234567890123456789012345678901234567890						
©003A	HTL	10/06	7204	09:50	0002	\$001.30 9178923546 ♥Ć

### ITW Hobic (room format) layout example:

1	2	3	4	5	6	7
01234567890123456789012345678901234567890123456789012345678901234567890						
©004A	HTL	10/06	204	09:50	0002	\$001.30 9178923546 ♥~

If the PMS you are interfacing to requires a slightly different format (such as a 4 digit sequence number, dashes in the dialed number, etc), contact our technical support staff to create a custom PMS interface that will work for your location.

### **Sending admin call records to the PMS:**

Click on the PMS icon, and select the Output Params tab:

**Setup - PMS Output Parameters**

Property Id	Property Name
0	Default Property

Status: ☐ OFF ☒ ON
 Port Type: ITW Hobic (Station Format)

Output Type: ☒ Standard Output ☐ via CAN ☐ FTP ☐ Direct

Output Format: **Output Params** Communication Params TOC Letter Output Special Misc FTP

Send Admin Call Records: ☐ Yes ☒ No  
 Send Zero Call Records: ☐ Yes ☒ No  
 Sequence No. Wrap Time of Day: 23:59  
 Sequence No. Wrap No. of Days: 1  
 Suppress 1 from Dialed Digits: ☒ Yes ☐ No  
 Maximum Number of Retries: 3  
 Transmit After Number of Records: 1  
 Transmit After Number of Minutes: 5

Click on the **Update** button. Change the radio button selection from No to Yes for the “Send Admin Call Records”. Click the **Apply** button, then **Close** when done

**Sending a hobic record using the “Generate Test Call” tool:**

You can use this tool to generate a test hobic record to the PMS (make sure you have the PMS Data Monitor active, or you won’t see the record when you generate your test call). Click on **Actions > Tools > Generate Test Call**.

**Generate Test Call**

Generate Test Call

Calling Station  PBX

Date  Time

Dialed Digits

Duration  mins  secs Post to PMS ☐

**Call Results**

Station  Room  Type

Property  Dept  Chg Mod

Digits  TOC  Billing

Dest

Base Chg  Total Tax  Total Chg

Tax 1  Tax 2  Tax 3

Tax 4  Tax 5

Rec Posted  PMS Seq No

In the **Calling Station** field, enter a valid guest room station number. Click on the **Current Time** button. In the **Dialed Digits** field, enter a number that would be considered billable (such as an interstate number). In the **Duration** field, enter the number of minutes the call will be. Check the **Post to PMS** box.

When all fields have been filled in, click the **Price this Call** button.

**Generate Test Call**

Generate Test Call

Calling Station: 7305 PBX: 0 - Mitel

Date: 10/06/2008 Time: 17:26:31 Current Time

Dialed Digits: 17175343172

Duration: 2 mins 0 secs Post to PMS: ☒

Price this Call Refresh Record

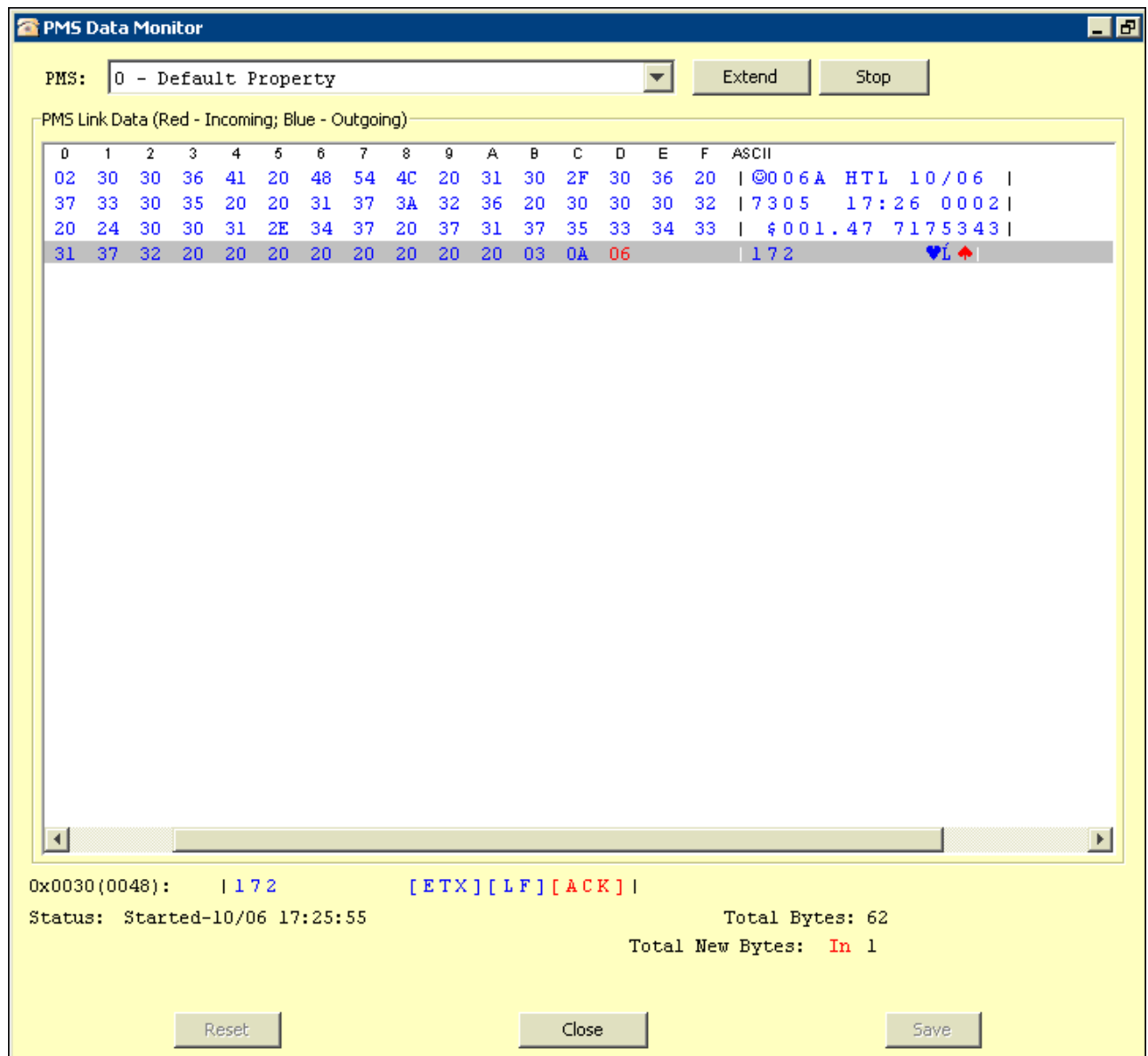
**Call Results**

Station	7305	Room	305	Type	Guest
Property	Default Property	Dept	0	Chg Mod	0
Digits	17175343172	TOC	Interstate	Billing	Vh
Dest	HERSHEY, PA				
Base Chg	1.47	Total Tax	0.00	Total Chg	1.47
Tax 1	0.00	Tax 2	0.00	Tax 3	0.00
Tax 4	0.00	Tax 5	0.00		
Rec Posted	<input type="checkbox"/>	PMS Seq No	<input type="checkbox"/>		

Close

The **Call Results** section shows how the system priced the call based on the Chg Mod and its TOC.

The PMS Data Monitor shows the hobic record that was transmitted to the PMS from this test call:



You can tell that the PMS responded to this message, because an acknowledgement ASCII character (HEX 06) is displayed in red at the end of the message.

## **STEP 9: Accessing the InnCharge web interface**

Two items are necessary before proceeding with this task:

1. The InnCharge IP server must be on the same network as the other workstations that are attempting to access the web interface.
2. You need to know the machine name or the IP address of the InnCharge server.

Once you know the machine name (or the IP address) of the InnCharge server (we will use ITW-VOICEMAIL as our example), open Internet Explorer. Enter an address of **http://itw-voicemail/inncharge/Default.aspx**

The follow web page will appear:

The same User Login information that is used with the application is valid here (admin/admin). For front desk hotel users, use a login of **fd** and a password of **fd**

For more information on the features of the web interface, please refer to the Chapter 12 - InnCharge Web Interface of the InnCharge User Manual.

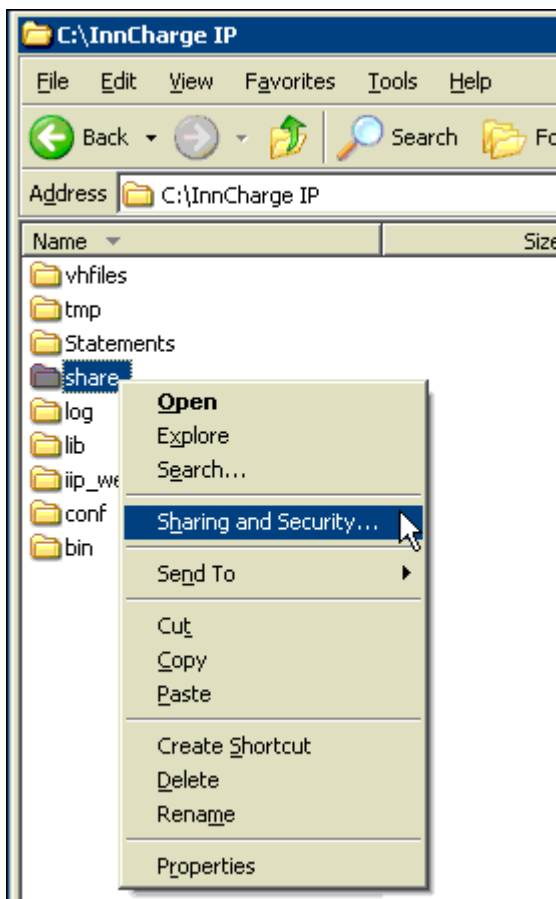
## **STEP 10: Setting up the InnCharge Client (optional)**

(Only four simulations connections are allowed)

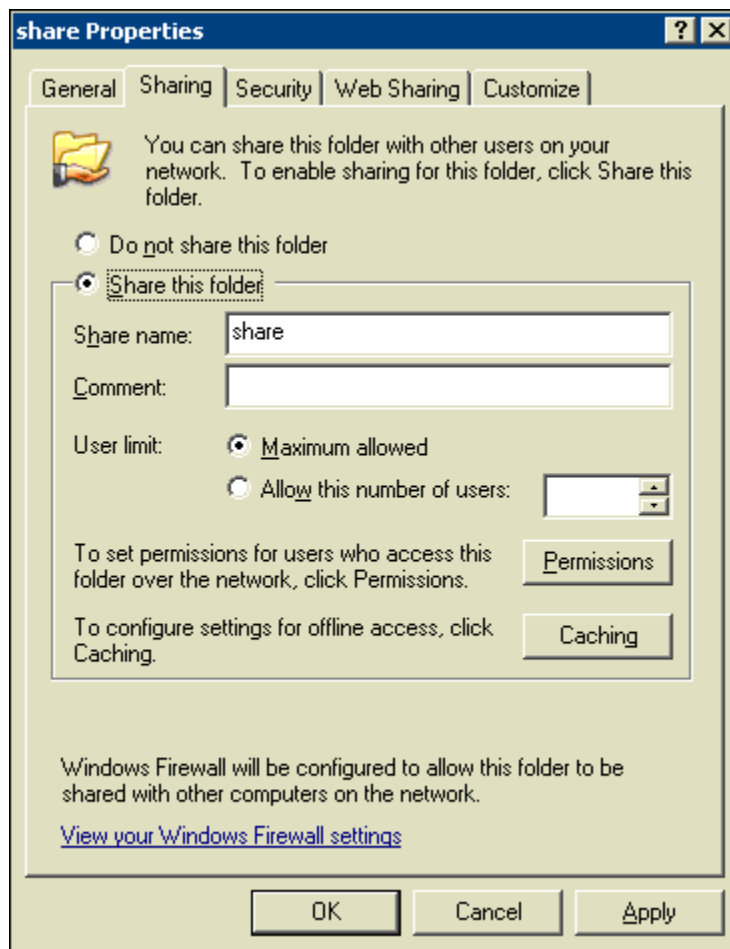
Three items are necessary before proceeding with this task:

1. The InnCharge server must have a static address assigned to it.
2. The InnCharge server must be on the same network as the other workstations that are installing the InnCharge client.
3. The InnCharge\share directory on the voicemail system needs to be shared.

To share this folder, double-click **My Computer** from the desktop, and find the InnCharge\share directory (typically located on the C: drive). Right-click this folder and choose **Sharing and Security...**, as shown below:



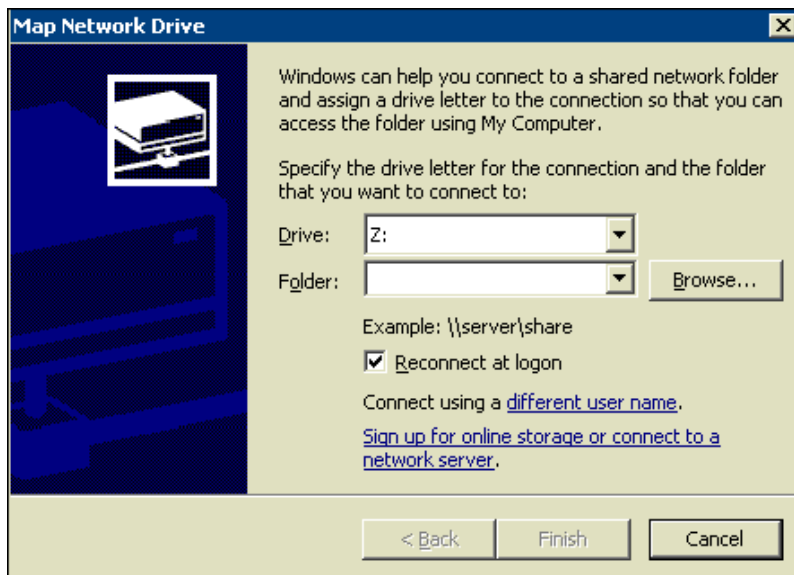
Next, choose **Share this folder**, and click OK.



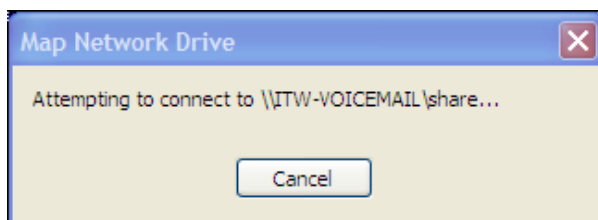
The InnCharge\share folder is now shared.

### **Mapping a network drive:**

You should now map a network drive from the workstation you are installing the client on to the shared directory on the InnCharge server. Right-click on **My Network Places** and select **Map Network Drive...**



Click the **Browse** button to find the server on the network that's running the InnCharge application. Or if you know the path, you can type it in the Folder field. For example, if the computer name of the InnCharge IP server is called ITW-VOICEMAIL, then the path would be [\\ITW-VOICEMAIL\share](#). Keep the **Reconnect at logon** checked, and then click the **Finish** button. As soon as you click Finish, the workstation will attempt to connect:



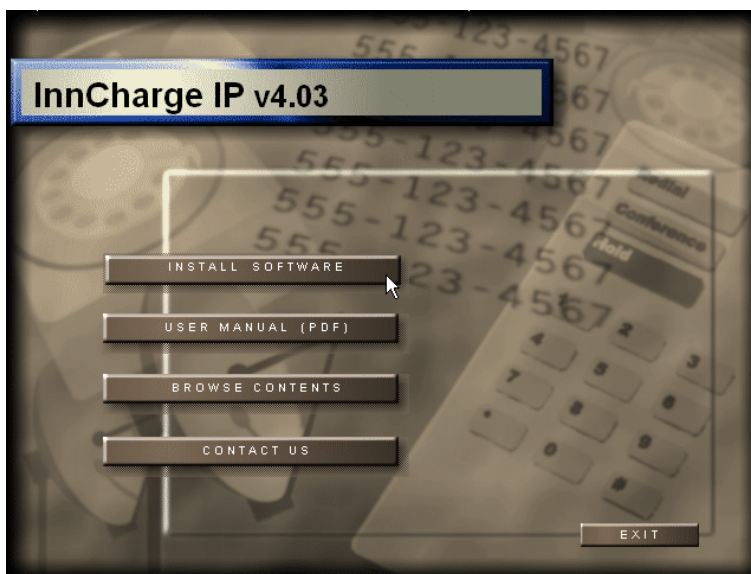
You will then most likely be prompted for a user name and password:



For InnLine voicemail servers systems running the InnCharge application, enter a User name of **innline**, and a password of **2020**. Keep the **Remember my password** field checked, so the workstation can re-connect automatically if you shut it down or re-boot it. If you are having difficulty with mapping a drive, please contact Innovation technical support for guidance.

You may now proceed with installing the InnCharge client software on this workstation.

Insert the InnCharge CD into the workstation's CD-ROM drive. At the InnCharge menu, choose **INSTALL SOFTWARE**

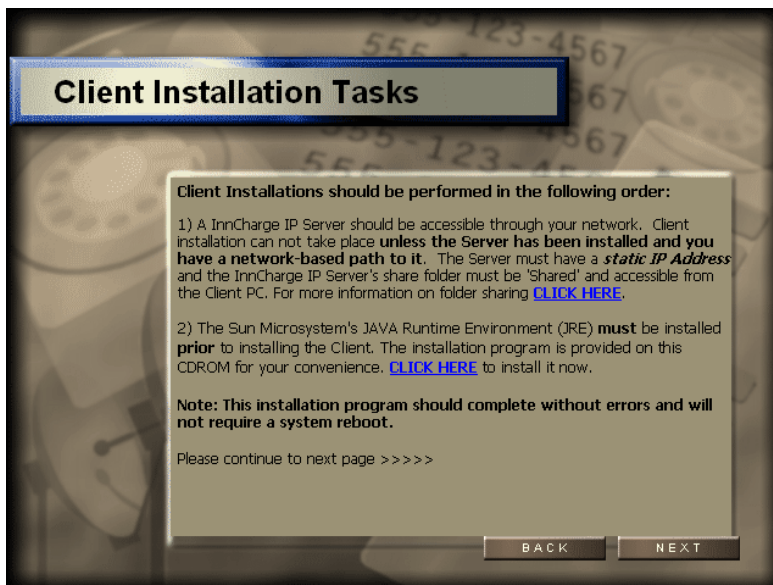


At the next screen, choose **Client Installation**



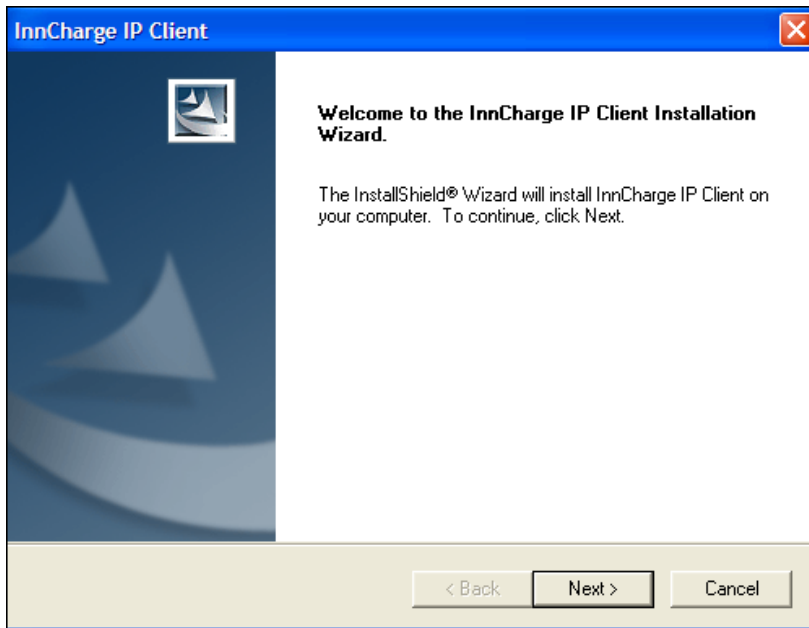
Item 1 discusses the importance of having a static IP address assigned to the InnCharge IP server, and having a mapped network drive to it, prior to installing this client software.

Item 2 will install Sun Microsystems JAVA Runtime Environment. Select **CLICK HERE** to install it. If the JAVA runtime has already been installed, the system will inform you of that. It's not necessary to reinstall it. Click **Next** for the next phase of the installation.

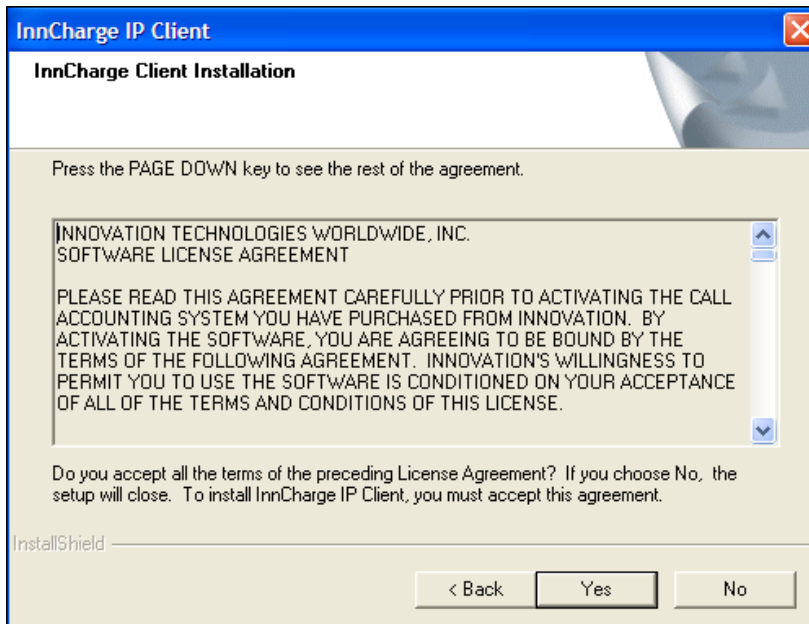


Select **CLICK HERE** to start the InnCharge Client installation

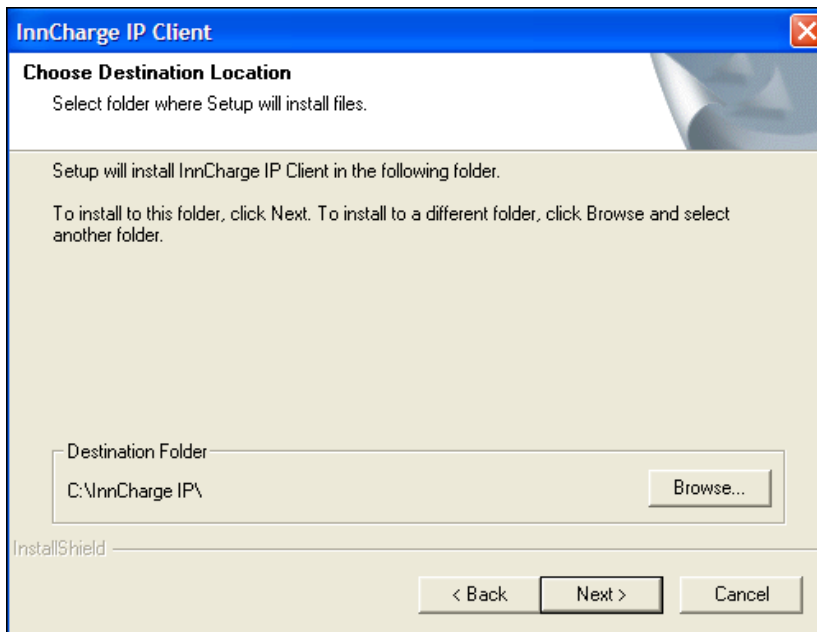




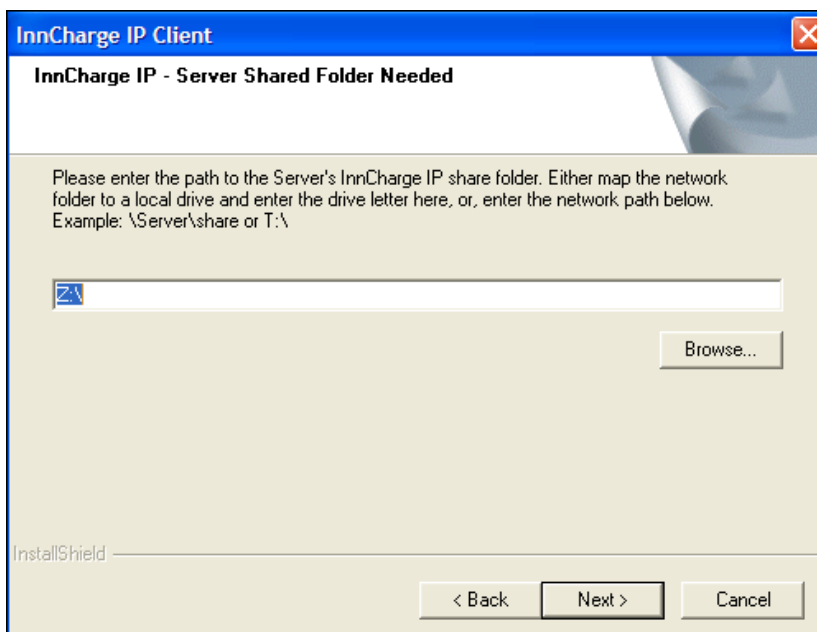
Select **Next**



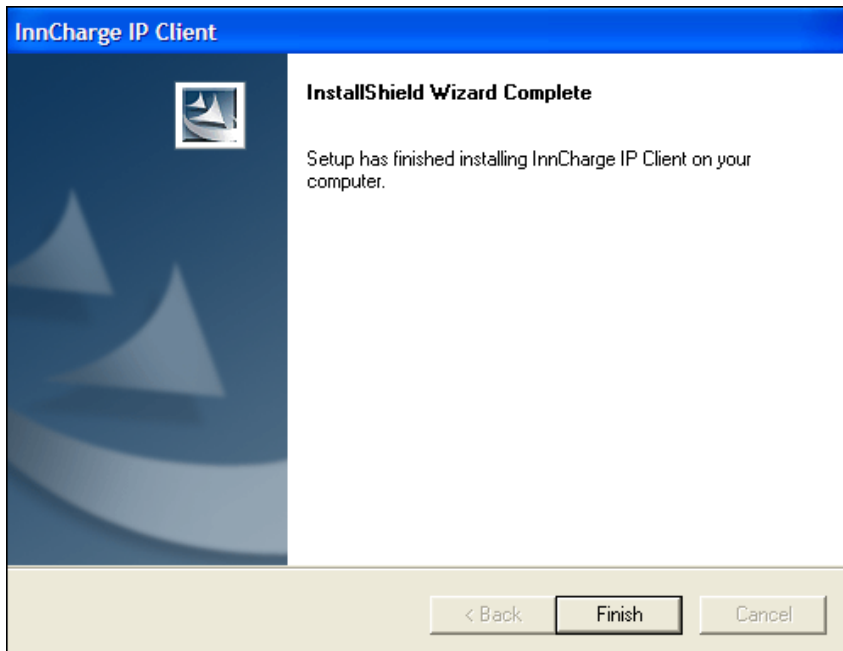
Select **Yes** to accept the terms of the software license agreement.



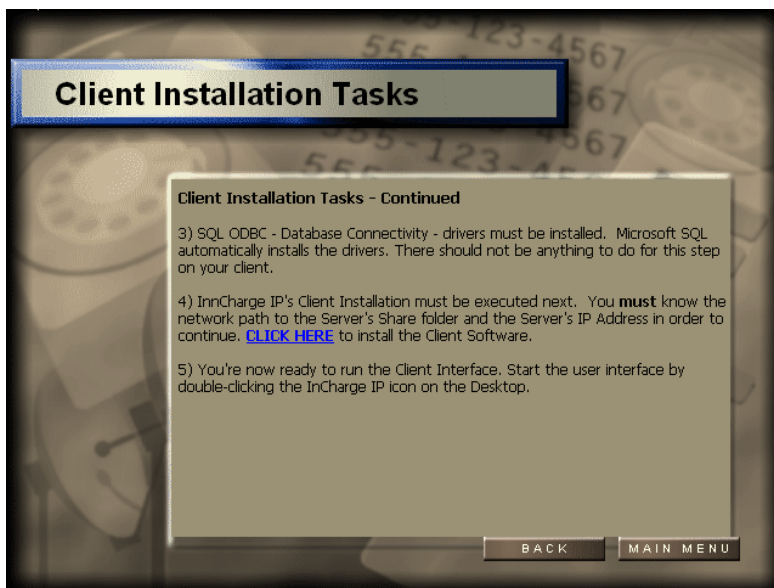
Select **Next** to install the software to the displayed Destination Folder.



Enter the drive letter you mapped from the workstation that's connecting to the shared folder on the InnCharge server. In our example, we had mapped the drive letter Z. After clicking **Next**, the installation will start.



Click **Finish** to close the InstallShield Wizard window.



Click on **MAIN MENU**, and then **EXIT**.

You're now ready to run the Client Interface. Start the user interface by double-clicking the InnCharge icon on the Desktop. The usernames and passwords that you have programmed on the server apply to the client.

## **Notes:**